

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
18 December 2003 (18.12.2003)

PCT

(10) International Publication Number
WO 03/103822 A2

(51) International Patent Classification⁷: B01J
(21) International Application Number: PCT/IB03/03213
(22) International Filing Date: 11 June 2003 (11.06.2003)
(25) Filing Language: English
(26) Publication Language: English

SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US,
UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(30) Priority Data:
0207175 11 June 2002 (11.06.2002) FR
60/421,112 9 September 2002 (09.09.2002) US

(71) Applicant (for all designated States except US): ETHY-PHARM [FR/FR]; 21, rue Saint-Matthieu, F-78550 Houdan (FR).

(72) Inventors; and

(75) Inventors/Applicants (for US only): HOARAU, Didier [FR/CA]; 5716, rue Saint-Urbain, Montreal, Quebec H2T 2X3 (CA). DELMAS, Pascal [FR/CA]; 97 McCulloch, Outremont, Quebec H2Y 3L8 (CA). LEROUX, Jean-Christophe [CA/CA]; 329 Notre-Dame Est, Apt. 327, Montreal, Quebec H2Y 3Z2 (CA).

(74) Agents: MARTIN, Jean-Jacques et al.; Cabinet Regimbeau, 20, rue de Chazelles, F-75847 Paris Cedex 17 (FR).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD,

Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations

Published:

- without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: STEALTH LIPID NANOCAPSULES, METHODS FOR THE PREPARATION THEREOF AND USE THEREOF AS A CARRIER FOR ACTIVE PRINCIPLE(S)

(57) Abstract: The present invention relates to stealth lipid nanocapsules consisting of an essentially lipid core which is liquid or semi-liquid at ambient temperature, and an outer lipid envelope comprising at least one hydrophilic surfactant which is lipidic in nature, at least one lipophilic surfactant which is lipidic in nature and at least one amphiphilic derivative of poly(ethylene glycol), the molar mass of the poly(ethylene glycol) component of which is greater than or equal to 1 000 g/mol, preferably greater than or equal to 2 000 g/mol, to the methods for the preparation thereof and to the use thereof as a carrier for active principle(s).

BEST AVAILABLE COPY

WO 03/103822 A2